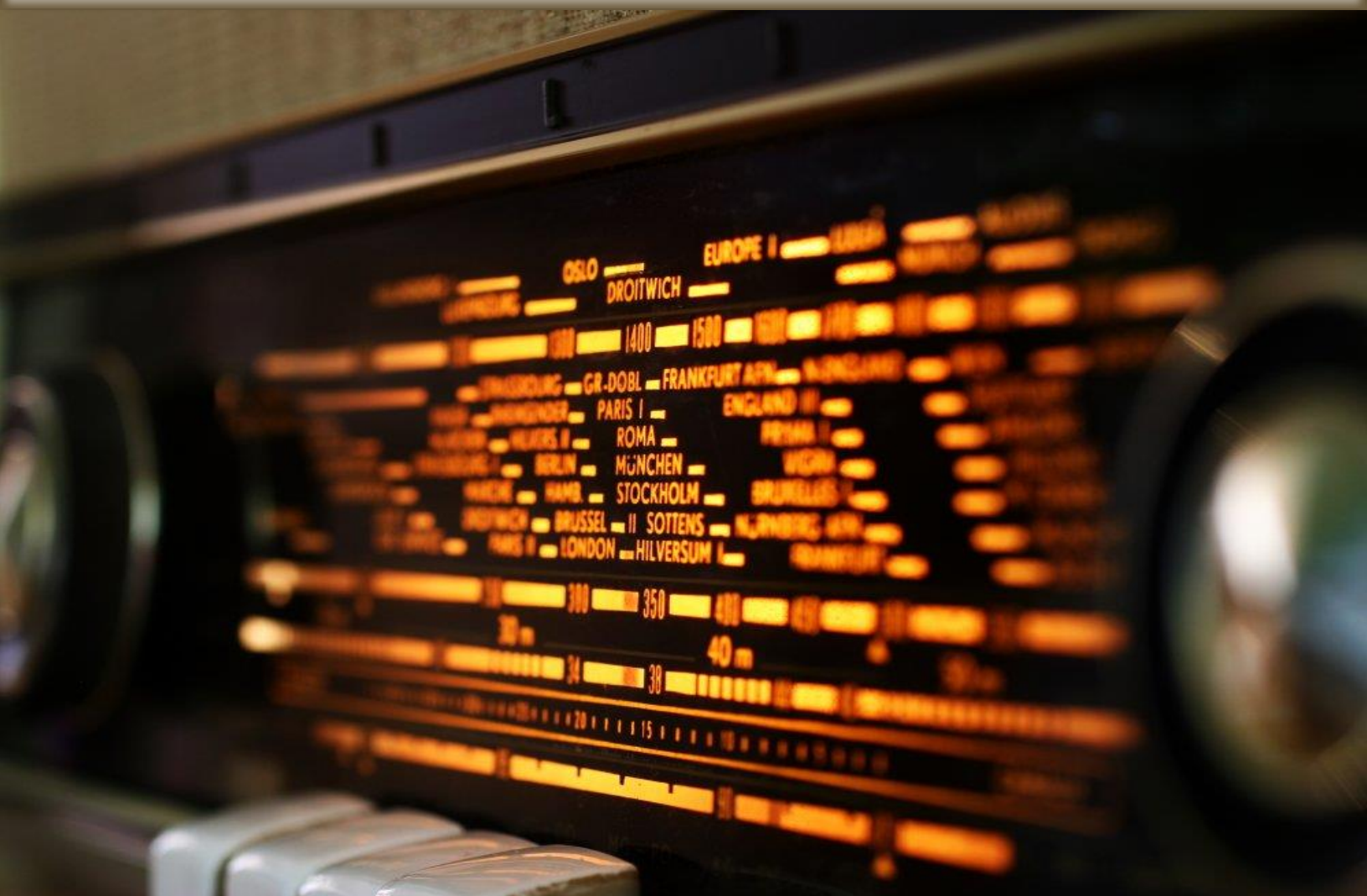




The Surrey Amateur Radio Club

Communicator



October 2014

Learning CW

Page 4

Contest Contender

Page 8

We Need You

Page 17

Features

Radio-Active
Rick Law VE7GMO

Cruise-In Photos
Page 10

President's Report
Page 20

Plus

October Calendar
SEPAR Report

QRM

News You Can Lose
and Much More!

The Newsletter of the Surrey Amateur Radio Club

October 2014



At The Last Meeting...

SURREY AMATEUR RADIO CLUB

TELEPHONE & ADDRESS

(604) 591-1825

12144 - 57A Avenue
Surrey, BC V3X 2S3
SARC@ve7sar.net

EDITOR

John Schouten VE7TI
SARCcommunicator
@outlook.com

WEBMASTER

Hui Yee VE7YXG

NET MANAGER

Rob Gilchrist VE7CZV

QSL MANAGER

Nelson Eisel VE7NAE

REPEATER MANAGER

George Merchant VE7QH

INSIDE THIS ISSUE

click on the page number below

Last Meeting	2
Learning CW	4
Contest Contender	10
QRM	12
News You Can Lose	13
SEPAR Report	16
Radio-Active	18
QRT	20

Minutes of the Surrey Amateur Radio Club Monthly Meeting

September 10, 2014

Introduction

The meeting was called to order at 1900 hrs by President John Brodie VA7XB. Two visitors were welcomed: Al Gardiner and recently licensed Jason Worobets VA7JWO.

After the agenda was approved, the 2014/2015 SARC Executive was introduced, newly elected Directors being Stan Williams VA7NF and Al Peterson VA7ALZ. The business portion of the meeting commenced with committee/activity reports:

Cruise-in

Thanks were expressed to all those members who came out to help at the Cruise-in and contributed to the success of the raffle. Final financial results are not yet available.

Field Day

Field Day has been reported at some depth in the August edition of the Communicator. The SARC/SEPAR team made a good showing on both number of contacts and bonus activities. Many participants attended a FD debriefing meeting in August and brought forth a number of recommendations for improvement. Final results will not be available until November.

Financial

Scott VE7HA reported that if the expected Surrey grant is included and equipment purchases (triplexer and

bandpass filters) are excluded, Field Day income exceeded expenses by about \$100. Scott requested that any outstanding FD expenses should be submitted asap for reimbursement.

He also reminded members that 2014/2015 membership fees are now due and can be paid with PayPal via the website.

SARC shoulder patches are now available for purchase at \$4 each or \$10 for 3. Thanks were expressed to John VE7TI for creating the graphics and arranging the order.

Communicator

John VE7TI noted that the Communicator has a new "look". Since he is also responsible for the membership list, he requested that members ensure all information, including email addresses, are correct. He encouraged members to provide material, especially personal articles, for the Communicator as these are what makes the publication unique and interesting.

Website

Hui VE7YXG reported that the website has been "cleaned up" over the summer, to remove obsolete material and bring it up-to-date. Stan VA7NF has volunteered to do another sweep and identify any additional items needing revision.

If there any any willing volunteers, Hui would like to take a break as Webmaster.

Net

Rob VE7CZV reported that the net was functioning smoothly and he would

New SARC Webmaster Needed

Hui Yee VE7YXG has been looking after management of SARC's website for longer than most of us have been members. He would like to take a well-earned break from that job and so we are looking for a replacement.

The job requires some knowledge of website construction and HTML language etc., in order to regularly update the information to keep it interesting and current.

If you are that person and can spare a few hours a month, then please let John VA7XB know via va7xb@rac.ca.

always welcome new net control operators. If you are interested, contact Rob via:

robgil@telus.net

Repeater

George VE7QH reported that the repeater is functioning well, but no progress has been made by the City of Surrey in construction of the equipment enclosure.

Upcoming Meetings

John VA7XB outlined the program for the remainder of 2014 and tentative plans for 2015:

- Oct 8 - John White VA7JW on antenna modeling
- Nov 12 - Focus on CW by Jim Smith VE7FO
- Dec 6 - Christmas party
- 2015 (all tentative): Dave Miller VE7PKE on SDR kits; Ron Casey VE7VTA on the role of amateur radio under the terrorist threat; Joe Zaccaria VE7TOL on Raspberry pi; Adam Farson VA7OJ on German WW2 radio; a Show & Tell

Contesting

John VA7XB announced that the contesting group has evolved from previous years' "Operator Training" program, and will be led by Brett VE7GM. Those already involved will be invited to participate and sharpen their skills on contests throughout the year.

Interested persons not already involved should make their interest known to either Brett or one of the Executive. The first scheduled event is the CQ WW DX contest for RTTY on Sept. 27th weekend. Stan VA7NF suggested that in addition to strictly HF contests, numerous VHF contests are available that should be considered by those whose primary interest is VHF.

CW Interest

In response to questions, 6 members indicated they are capable of sending/receiving CW at 15 wpm or more, 1 member indicated proficiency at the 5 wpm level, and 6 members indicated they have no CW proficiency but were interested in learning. Jim VE7FO then provided some information on learning CW, the CW Operators Club, and CW Academy and CWT contesting (details elsewhere in the Communicator). Hiu VE7YXG noted that the website contains some CW information including a character-to-sound chart. (Also see pages 4 and 8 for articles)

Task Assignments

John VA7XB reviewed the list of task assignments from last year, requested confirmation that those named were willing to continue, and also noted that some key positions were not yet filled. Stan VA7NF volunteered to assist with contesting, and Alex IZ7FMM volunteered to help with mentoring of members. Jinty VA7JMR indicated she could use some help with organizing the Christmas party (note: the complete list of task assignments as it currently stands is included in "QRT" on page 20 of the Communicator).

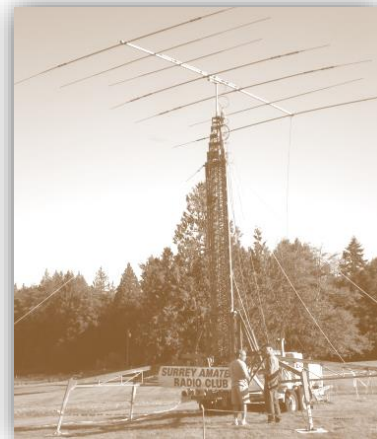
Discussion on Future Direction of SARC

Bill VE7XS moderated a discussion of the future direction of SARC. Comments offered by members and recorded by Bill will be circulated privately to the membership.

A reminder that memberships are now due.

The meeting concluded with a swap meet, and was adjourned at approximately 2100 hrs.

~ Minutes prepared by
Rob VE7CZV and John VA7XB



The **SARC Communicator** is published monthly except July and August for members of the Surrey Amateur Radio Club.

To subscribe, unsubscribe or change your address for e-mail delivery of this newsletter, notify SARCcommunicator@outlook.com

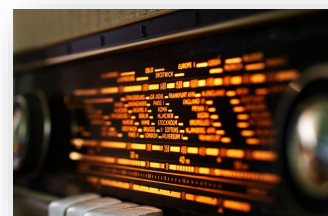
Non-members living in the Greater Vancouver area may receive one trial issue.

Beyond our membership area, annual Communicator subscriptions are available for a \$5 donation towards our Field Day fund.

SARC maintains a website at www.ve7sar.net that includes club history, meetings, news, photos and other information.

On The Cover...

Pictured is a radio receiver manufactured by Philips in the Netherlands and Telefunken and Grundig in Germany. These were very common in Europe in the 1950s and many of you will remember them. It was on a radio such as this that I had my first experience with the magic of the hobby, first spinning the dial to hear European broadcast stations within range and also cruising the shortwave bands to listen to Radio Moscow, Radio Nederland, and many others. I recall the beautiful sound from the large speaker and wooden cabinet and that warm glowing dial. ~ Ed.



October 2014



So You Want To Learn CW?

Brett Garrett VE7GM



"I've always liked Nike's slogan: "Just Do It". It sums up for me the one problem I've so often seen, in myself and others, that keeps people from doing something they say they want to do: lack of commitment.."

Periodically I hear fellow hams say they would like to learn CW. Recently I heard yet another ham say he would like to learn CW since we get twice as many Field Day points for CW contacts than for phone contacts. He suggested the club should help members learn.

At the September club general meeting, a quick survey showed that six members present were capable of operating at 15 words/min (wpm) or better, one was capable of 5 wpm, and six members were interested but had not yet learned CW. Clearly there is some interest in CW, and particularly in learning CW. If all those interested were to reach at least 15 wpm we could double our cadre of CW operators. If those who can operate at 15-20 wpm raised their proficiency to 25 wpm, we could significantly increase our contact rate in CW contests (like Field Day).

Back when I first got my licence (mid-1960s), being able to send and receive CW at 10 words per minute (wpm) was a requirement to earn a ham radio operator certificate. Ham classes at that time had a session where the instructor sent code and the class "copied" it.

Today, however, the inefficient teaching-intensive way I first learned code is unnecessary. I started learning again, almost from scratch, in late 2011 after being away from ham radio for nearly 35 years. The first thing I discovered is the wide range of excellent resources now available via the internet. I'm convinced that, by making good use of the (largely free) materials available on the internet, anyone who can read and write can learn CW to the 20 wpm level, if they are prepared to work at it. All that might be needed is a little advice on "how to get started", which I felt I could provide based on my own recent experience. And so this article was born.

Keep in mind that these are my personal recommendations, based on my own personal experience. Looking on the internet you'll find all kinds of articles telling you how to learn CW. Some of them may be helpful to you. The tools and techniques I discuss here worked for me.

Why CW?

CW is magic.

Since changing my operation from SSB (and some digital) to almost exclusively CW, I've added stations to my log from all over the US, the Pacific, and the occasional contact in Europe.

Now, if I had done this using a tower and beam antenna, running the usual 100 watts, this wouldn't be even worth mentioning. Even if I pointed out that I was working stations in high demand (like the W1AW portable stations, and TX6G, a DXpedition on the Austral Islands), where I generally had to "bust a pile-up", there would be nothing worth writing about. If, that is, I had been using a beam and 100 watts.

But I hadn't. I had been running a simple "end-fed half wave" wire antenna, less than 10 m above ground at its highest point, and using my KX3 portable transceiver set for 5 watts output.

The type of setup I use (QRP transceiver with simple wire antenna) could be within reach of many, or even most of you, and the low power avoids almost all problems with interference to your neighbours' badly constructed (but high-cost) TVs.

But did I really mean I could contact Florida on 5 watts? Yes—confirmed on ARRL's Logbook of the World, along with Hawaii, Japan, Austral Islands, New Zealand, Aland Island (Finland), Guam—all on 5 watts. To top it off, my KX3 radio, with antenna, packs into a medium sized lunch bag and runs on an internal battery pack that holds 8 rechargeable AA cells. Perfect for an afternoon's operation in a park. Although only a mediocre operator, using just 5 watts into a length of wire hung from a tree, I've been able to routinely bust pile-ups of more powerful stations who were using more elaborate (and expensive) antennas.

But, of course, I was using CW. Did I mention CW is magic?

It was this magic quality of CW that convinced me to get back into CW after 35 years away from ham radio. The three primary benefits to me are:

1. More contacts, and at greater distances, at any power level (extremely important in a contest).
2. DX contacts at low power (very important for QRP enthusiasts, who limit themselves to 5 watts of power output).
3. Less use of band space, so more room to find a slot in which to operate when the bands are crowded (something we're increasingly likely to see on the lower HF bands as we slide down the backside of the sunspot cycle over the next few years).

CW, because it is just on and off, puts out the radio's full power (100 W for example) when it's on. SSB, on the other hand, puts out an amount of power that increases as the voice loudness increases (to 100 W maximum in our example, and usually much less).

Further, on SSB we need to carry the "frequency range of information" in human speech, which is roughly 2500 Hz (receive filters 2100 to 2800 Hz wide are typical). CW, on the other hand, is "carrier on, carrier off", and needs only a couple of hundred Hz bandwidth (receive filters 200 to 400 Hz wide are typical).

So, put crudely, with SSB we are sprinkling our "up to 100 W" over about 10 times the frequency range of our "full 100 W" CW. The tight filtering with CW means the receiver passes through less atmospheric noise (QRN) and man-made interference (QRM). All of this makes for more "punch" in a CW signal at the receiver. And that's why it's possible to bust pile-ups using 5 W into a simple wire antenna.

You Can Do It-If You Truly Want To

I've always liked Nike's slogan: "Just Do It". It sums up for me the one problem I've so often seen, in myself and others, that keeps people from doing something they say they want to do: lack of commitment.

CW is often seen as intimidating. Certainly, anyone who wants to do it is going to have to work at it. No one else can learn it for them. Basic capability in CW will require (based on my own recent journey to date) 2-3 years of a minimum of ½ hour of practice each day (best split over two sessions). How do I define "basic capability"? Being able to participate in most CW contests and being able to hold a reasonably satisfying on-air CW conversation with another ham at speeds of 15-20 wpm.

It's actually not difficult to continue this level of commitment if one is serious at the

start and keeps at it. It has been said that habits can be formed quickly with serious initial effort. CW practice will have to become a habit. But the progress becomes very enjoyable once the 10 wpm threshold is reached.

So before reading further, ask yourself if you really want to learn CW. You will not succeed if you are not willing to work at it over an extended period. Better to be honest with yourself and stop saying (or thinking) you want to. You aren't going to dream yourself into becoming a CW operator any more than you dreamed yourself into reading and writing a language. But if you really want to learn CW to the level of basic capability, here are some of the tools and techniques I've found helpful in my own journey back into CW after some 35 years away from the radio.

Learning to Copy CW

Now that you are convinced that CW is worth the effort (you are, aren't you?), and you've examined your schedule to find a spare half hour a day (you have, haven't you?), how can you get started?

Just as with human speech, there are two actions to CW: sending and receiving. And, just as with human speech, listening is more important than sending. So we start with listening, or "copying" as it's generally called. (I will cover learning to send in a future article.)

The first thing to keep firmly in mind is that CW is received by your brain as sound. Many experts have pointed out that learning the characters as patterns of dots and dashes on paper is inefficient and ineffective. It is far better, from the start, to learn the characters only as sounds if you are ever to become comfortable with CW.

Fortunately, Hiu VE7YXG has put up a very helpful page on our www.ve7sar.net website that addresses this critical first step. On this page you'll find a table that will generate the sound of the numbers, letters, and common CW punctuation. (CW punctuation is normally minimized, with only ",", ".", "-", "?", and "/" being in common use.) You'll find Hiu's page here: <http://www.ve7sar.net/MorseCode/MorseCode.html#>

Start here until you have learned at least the simple, common characters: "e", "i", "s", "t", "m", "o", "a", "n", "r", and "k".

The next step is to drill using the "Koch" method, which presents a few characters at a time, adding characters until all letters,

"It is far better, from the start, to learn the characters only as sounds if you are ever to become comfortable with CW"



October 2014

Practice at least 1/2 hour a day, if possible in two sessions a few hours apart.

numbers, and common punctuation have been learned. Once you start with the Koch method, you can continue to learn new characters as you go.

To learn using the Koch technique I found a very helpful (and free) program called "Morse Machine" at G4ILO's website:

<http://www.g4ilo.com/morse-machine.html> (Look at the bottom of the page.)

Morse Machine teaches Morse using the Koch Method. Characters are presented in a prescribed sequence and the user types the appropriate key on the computer keyboard to indicate they recognize the letter. Initially only a few characters are presented, but as you prove you have mastered these, the program adds further characters until you know the full list of letters, numbers, and critical punctuation. A bar chart graphical display shows your progress. The slowest the program will send is 20wpm, so it prepares you well for the future stages in your learning. Keep drilling until you can work through the entire sequence with few errors. Practice at least ½ hour a day, if possible in two sessions a few hours apart. I used this program a great deal in the beginning, and it was grueling. But it worked.

Once all the characters are known, I believe the next step should be to start copying actual language (as opposed to random letter groups). There are many sources of computer-generated code, with perfect timing of the sound of each character, and perfect spacing between the characters. It is essential at this point that you learn the sound of perfect CW. You will be training your brain to recognize perfect code, and building a memory of how good code sounds which will be invaluable when you begin learn sending.

I find the ARRL code practice files very helpful. These can be found here: <http://www.arrl.org/code-practice-files>

Files are available for speeds from 5 wpm to 40 wpm, so can be valuable whatever your experience level. The text is taken from past issues of QST magazine. Each mp3 file containing the transmitted code is accompanied by a text file containing the associated text, which will be your "answer sheet". Don't bother with speeds below 10 wpm—you must learn to copy at speeds that are useful in the real world.

Once you have listened to a few of these files, you will begin to recognize the sounds of common sequences of letters as single elements (sort of like "super-characters"). The first of these for me was "the", which is not only a word in its own right, but the root of many other words such as "then", "there", "their", "these", etc. This "letter group" recognition is very important to being able to increase your copying speed to 20 wpm and beyond, and is a benefit of starting to copy real text early. Make a point of listening for common letter groups in your practice sessions.

Don't think you must be able to write the code down when listening to get useful practice. Eventually you'll need to "copy in your head", so even just listening for the common letter groups when you are travelling in the car is very helpful (but don't become distracted!). You can burn the files to a CD, or load them on an iPod or even your cell phone if you have a "handsfree" Bluetooth connection between your phone and your car sound system (this is the method I use). The files just continue to play as you drive, and you can mentally "tune in" and "tune out" as traffic conditions permit, with no loss of benefit. (You can do this on a bus too, but wear a good sound-sealed set of ear buds or your neighbours might be tempted to heave you out a window!)

Another source of plain language code practice is the Quote Of The Day (QOTD) CW podcasts, which can be found with Apple's

Operating Tip:

How do I call CQ?" Usual practice is 3 x 2 or 3 x 3: "CQ" three times followed by your call twice or three times. Use phonetics for your call if using phone. If band noise is high, or you suspect propagation is "iffy", you might want to give your call a few extra times. Keep the transmissions short, and always leave enough listening time to be able to hear a signal coming back to you. (A few people get so engaged in calling CQ they transmit for 30-60 seconds without a break; potential respondents get impatient and go back to spinning the knob.)



iTunes music software. Look under “Store” then “Podcasts” then search for “QOTD”, which is the “Quotes of the Day” converted to CW. The advantage of the QOTD podcasts is that they are short and change daily. Podcasts are available in speeds from 5 wpm (not recommended) to 30 wpm (not recommended for beginners). A good place to start is the 10 wpm podcasts.

Whether you are copying the ARRL code practice files, or the QOTD podcasts, don't worry if you can't copy each one perfectly. Just get what you can and keep at it; you'll find you do better as time goes on.

After you begin feeling comfortable copying the ARRL code practice files or QOTW podcasts, you will be ready for more serious drill. At this point you will want to start driving your speed up, and the easiest way to do this is to make use of “Farnsworth” spacing. With Farnsworth spacing, the individual characters are sent at a high speed (here I suggest 20 wpm), but the spacing between characters is increased to give a lower average speed. So if you are reasonably comfortable copying 10 wpm code practice files then you could set the average speed to 10 wpm and the Farnsworth speed to 20 wpm. The higher speed characters will train your brain to recognize the characters you already know when sent at a higher speed. The extra time between characters gives your brain some time to “catch up”, and recognize that the burst of sound you just heard was an “s” and not an “h”.

There are several fine programs available that send code with Farnsworth spacing, including G4FON's free Koch Method CW Trainer, available at <http://www.g4fon.net> (look to the left and select the “Koch CW Trainer”). (Note I am listing programs which run under Microsoft Windows; there are also fine programs that run on Mac computers. If you, like me, prefer Macs, then send me an email at my call @rac.ca and I'll send you a list of Mac-based programs that I think will be helpful. Most of these aren't free, however.)

G4FON's trainer has various operating modes. The “Text File” capability allows you to load in a short text file and have the program send it to you. By selecting an “Actual Character Speed” of 20 wpm, and an “Effective Code Speed” of 10 wpm, you can use the

Farnsworth method to train. The program has a lower window which displays the text after it has been sent, so you can see how well you are doing.

The program also offers two other very useful modes. One is the “Words” mode, where the program sends you lists of common words and word endings, selected from a drop-down list. The other is the “QSO” mode, where the program sends you simulated QSOs, just as you might hear on the air (except, unlike what you will hear on the air, the code from the program is machine-perfect).

The program has many other features, allowing you to add noise, fading (QSB), simulate weak or strong signals, create irregular (“human-like”) character timing, etc. Once you've mastered the basics you can have a lot of fun playing with all the “complicating” factors.

Another similar program is G4ILO's MorseGen, at <http://www.g4ilo.com/morsegen.htm>. MorseGen can be used to drill with characters using the Koch Method, groups of random letters or numbers, common words, plain text from a file, or pseudo-QSOs. By using the speed and spacing sliders, you can create Farnsworth-like spacing.

As you progress, you will need to learn to copy “in your head”, without pencil and paper. You can, of course, do this with the ARRL code practice files, or QOTD podcasts. The problem with these, however, is that the spacing is “regular”, rather than Farnsworth. A program that allows Farnsworth spacing that I've found useful for this sort of practice is ebook2cw, at <http://fkurz.net/ham/ebook2cw.html>

ebook2cw is a command line program but it has an optional graphical user interface available which simplifies use for many of us. The program converts a user-selected plain text file to Morse code audio files in MP3 (or OGG, if you prefer) format. It works on several platforms, including Windows, Linux, FreeBSD and Mac OS X. The program isn't easy to configure on your machine (e.g you'll have to install several additional files in the same directory as the executable program), but the effort is worthwhile.

If you look to the online (and free) Project Gutenberg library at <http://www.gutenberg.org>, you can find text versions of out-of-copyright

books that may look interesting to you. The generated mp3 files can become huge if you translate an entire book at low speed, so try just a few chapters to start. Be sure you edit out all the unusual punctuation (all the keys on the computer keyboard that I didn't list earlier), or you'll be very confused by some legitimate but highly unusual Morse characters. After you do your first few conversions you'll get the knack and soon have a superb supply of interesting material sent to you in Morse, using machine-generated code with whatever extra spacing (a la Farnsworth) you wish to apply. This is my favourite CW training program!

Many of the programs I've mentioned will generate code at your choice of tone frequency. I suggest something in the 600-700 Hz range, but (now you are becoming comfortable with CW) you can adjust the tone to suit your personal preference. Some programs even allow you to change the wave shape from sine (the usual) to sawtooth or square wave. Again, you may find these wave shapes better suit your personal preference.

A couple of other programs which are very effective for CW contest training are the popular Morse Runner (at <http://www.dxatlas.com/morserunner>) and the (much more demanding, in my view) RUFZXP, available at <http://www.rufzxp.net/>. These are programs that experts use to drill and get their speeds up before critical contests. If you are reading this article, it will probably be a while before you are ready for these. When you are ready, you can talk to a member of the club's contest group to learn more about their use.

Once you become comfortable copying code at 15 wpm, and can get the gist of at least some of it in your head (without pencil and paper), you are ready to try some on-air QSOs at 10 wpm. But before that, you'll need to learn to send, and that will be the subject of a future article. In the meantime, you have your work cut out for you learning to copy proficiently!

In CW-speak, “gl es 73”.

~ Brett
VE7GM



October 2014



The Contest Contender

Jim Smith VE7FO

Introduction

Jim Smith VE7FO made a brief presentation at the September SARC General Meeting about learning CW. On-line training is available and Jim has prepared an outline of the path to CW competence and reasons for doing so.—Ed

A. Benefits from developing CW competence

- Gives you a lot more people you can talk to.
- Lots of CW ops never use voice

Secret Morse Code... Messages In Music

As we all know, rock and roll is made by Satanists intent on hiding subversive messages in their devil music. But what if I told you that all musicians are, in fact, colossal nerds, and those messages are all in Morse code. ABBA anyone?

<https://www.youtube.com/watch?v=PhOU89rCmTA>

• You can easily work people on CW you can't even hear on voice.

• There's at least a 2 S-Unit advantage of CW over SSB

If you want to work distant stations:

- You'll have far more success with CW than with voice. Because of the 2 S-Unit advantage

If you want to enter contests:

- Your CW contest scores will be much higher than in SSB contests because of the 2 S-Unit advantage

If you want to make a significant contribution to our FD score:

- CW contacts are worth twice as much as voice contacts.
- CW contacts are easier to make than voice contacts. Because of the 2 S-Unit advantage

B. Difficulties in learning CW receiving and sending

- It's like learning a second language
- The "language" has only about 50 "words". These are the letters of our alphabet, the numbers 0-9, punctuation marks and certain procedure signals such as "wait", "end of message", "no reply expected" etc.
- It requires a time commitment of about an hour a day (every day) for eight weeks or so.
- No local instructor-led courses offered that I know of
- Have to do it on your own.
- On-line tools are available. Maintaining motivation is difficult.

C. Difficulties in developing CW contest skills

There are a limited number of suitable CW contests in the year. By the time the next one rolls around you've got rusty again. If you want to be competitive in the major contests you have to be

prepared to spend the entire weekend operating the radio with little time for sleep.

CWOPS www.cwops.org is an organization dedicated to furthering the use of CW by hams.

Contest skills development www.cwops.org/cwt.html run a CW contest EVERY Wednesday. There are three separate sessions and each session lasts for one hour. The times are chosen so as to favour different parts of the world. There is LOTS of activity so you won't get bored and 30 Qs in an hour is easily possible with a 100 Watt station. The top scorers make over 120 Qs in an hour. That's over 2 per minute.

While some of the ops go very fast they slow down for the less skilled. Results are posted to the web so you can see how you compare to others.

D. This is ideal for contest training

It doesn't chew up an entire weekend and it happens sufficiently often that you don't get rusty. High QSO rates are very possible because you're not waiting 5 minutes between Qs.

I've tried it and highly recommend it.

I plan to do a live on-air demo of one of these contests at a subsequent club meeting, probably in November.

The Morse Learning Machine Challenge

CW skills development

www.cwops.org/cwacademy.html

A. They have a free and very comprehensive on-line mentoring program called CW Academy. Check out the Quick Quiz to see which level is a best fit for you. Scroll down to the Students and Advisors line and click the "Click Here" button to browse the Resources material.

The program is so popular that the next available class is not until September 2015.

B. I suggest that if you are interested you sign up anyway, you can always cancel. It's possible that they will be able to attract more mentors which would open up some earlier slots.

~ Jim VE7FO

Learning Morse Code... The Rhythm Of The Code

CW can be difficult to learn. The recommended method is to aim for at least 20 words per minute and to recognize letter patterns rather than individual dits and dahs. With this in mind, here is one version of a learning tool:

https://www.youtube.com/watch?v=2_qZ92onhU



For humans it takes many months of effort to learn Morse code and after years of practice the most proficient operators can decode Morse code up to 60 words per minute or even beyond. Humans have also extraordinary ability to quickly adapt to varying conditions, speed and rhythm.

I want to find out if it is possible to create a machine learning algorithm that exceeds human performance and adaptability in Morse decoding. I shared some of these ideas with the New England Artificial Intelligence group about one year ago and got enthusiastic feedback from the participants.

Competition Details

During the competition, the participants build a learning system capable of decoding Morse code. To that end, they get development data consisting of 200 .WAV audio files containing short sequences of randomized Morse code. The computer-generated Morse data for the competition includes various levels of added noise. The signal-to-noise ratio, speed, and message content of the files vary randomly to simulate real-life ham radio HF Morse communication.

The data labels are provided for a training set so the participants can self-evaluate their systems. To evaluate their progress and compare themselves with others, they can submit their prediction results on-line to get immediate feedback. A real-time leaderboard shows participants their current standing based on their validation set predictions.

I have also provided a sample Python Morse decoder to make it easier to get started. While this software is a purely experimental version, it has some features of the FLDIGI Morse decoder but implemented using Python instead of C++.

You can of course leverage the experimental multichannel CW decoder I recently implemented on FLDIGI or the standalone version of Bayesian decoder written in C++.

There are also some new tools I posted to Github.

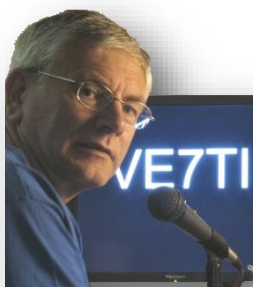
Please help me to spread this message to attract participants for the Morse Learning Machine challenge!

~ Mauri AG1LE



The goal of this competition is to build a machine that learns how to decode audio files containing Morse code.

October 2014



Tech Topics

John Schouten VE7TI

"So if any one ever wanted to know what might be in that old dummy load you brought back from the ham fest now is you chance to satisfy your curiosity"

I picked up on a recent story that had some local input:

A while ago I bought an old Heath dummy load... full of oil. My main concern was whether the oil in it contained PCB's. Being an older item I couldn't be sure. Since there is no way to tell by colour or odour I decided to research it further. What I found was a couple of simple tests that don't require any special equipment or chemicals and any one can do at home.

The first test is for PCB's in the oil, called a density test. Put a few drops of the oil in question in a glass of water. If the oil floats or spreads out on the top of the water it's free of PCB's. If it sinks then the oil contains PCB's. Since PCB's are heavier than water they will sink. Mineral oil is lighter and will float. However if any are detected this test doesn't tell the concentration amount.

The second test is a chlorine presence test. This test checks for chlorine in the oil to determine PCB presence.

This test is done by taking a piece of copper wire, dipping it into the oil and holding the wire over a flame such as a propane torch. Observe the color change of the flame. If the flame starts to turn green or blue green then PCB's are present. If the flame remains orange none are present.

The oil in my dummy load passed both tests. I changed it anyway because it smelled funny.

I can remember back when car AC systems were leak tested with a propane flame on a special wand. If the flame turned green, you were close to the leak area. I would imagine since refrigerant oils back then contained PCB's the same

type of test was used. Later replaced by putting dye in the system and checking with a UV lamp.

So if any one ever wanted to know what might be in that old dummy load you brought back from the ham fest now is you chance to satisfy your curiosity.

The North Shore Amateur Radio Club also ran an article in their newsletter. Our own John Brodie VA7XB responded:

In my previous job, I dealt with many PCB issues over the years.

PCB is heavier than water, so a drop of it in water will sink, unlike mineral oil. That makes for a pretty simple test to determine if it is PCB or not.

PCB is only "carcinogenic" in the sense that 50% of all chemicals, man-made or natural, are "carcinogenic" under extreme laboratory conditions which have little or no relevance to real life.

At BCR, we usually took our PCB containing transformers and oil-filled capacitors to Powertech labs (an offshoot of BC Hydro) they had a process for destroying it.

John White VA7JW adds: You are not supposed to use motor oil as it is not made to have electrical insulating properties, probably has a low flash point, is flammable, and "sticky" which is not wanted either.

With thanks to WB2NGX, John Brodie VA7XB and John White VA7JW, who wrote an excellent article on the topic: http://www.orcadxcc.org/content/cantenna_va7jw.pdf



The Heath CanTenna, their most popular product

The Parchman Ham Radio Conspiracy

...made worldwide news

Gulf Live carries an article about the book 'Tale of Two (Mississippi) Cities' that tell the story of convicted armed robber Billy Moody

In the 1940's while he was in Parchman State Prison for robbery, Billy Moody took a correspondence course in radio. Somewhere along the line his attitude changed. Despite the course's difficulty and fatigue left over from chopping cotton all day, he forced himself to study at night. From that beginning, every penny he got went into ordering parts from which he constructed both radio receivers and transmitters."

Moody became an electronic whiz and was able to repair anything electrical in the prison. He used his ham radio to communicate with the outside world and was known as the "Broadcasting Con" but, alas he did not hold an FCC amateur license. As his story drew more public attention, it turned out his operation was illegal and prison officials were forced to confiscate his equipment and his parole seemed in jeopardy.

It was the 'Pascagoula Chronicle-Star' that broke the story of his 'rehabilitation'. Moody's supporters as far away as Louisiana and Texas spoke out to his credit, prompting the prison superintendent to admit he knew Moody was broadcasting but thought it was just to the local prison population and not "that far away".

Moody's story did spread, as far away as England and France. As a result of the popular support, prison authorities and Governor Fielding Wright vowed that any publicity would not adversely affect Moody's parole hearing.

Read the full story at:

http://blog.gulflive.com/mississippi-press-living/2014/05/escatawpas_billy_moody_and_the.html



In December 1949, after ten years in prison, Moody was released. Interviewed on his first day home, he said he planned to begin a radio repair business.

He credited the local newspaper for his release since it had popularized his story.

Transmitter Noise

Some of us are familiar with the work done by Rob Sherwood NC0B over the years to identify rigs with poor strong-signal performance on receive - of particular relevance to contesters and DXers
www.sherweng.com/table.html

Jim Brown K9YC has now done a similar exercise, except he has measured the trash (key clicks, intermodulation distortion, and phase noise) generated by some popular rigs on transmit.

And, if you're thinking of buying a new rig, it's worth reading this first - k9yc.com/TXNoise.pdf

October 2014



QRM

...from the Editor's shack

*Do you have a photo or bit of club news to share?
An Interesting link?*

*Something to sell or something you are looking for?
eMail it to SARCcommunicator@outlook.com for inclusion in this column.*



Johnny Rampone VE7JGR

Johnny Rampone was on his way home, on foot, when he slipped and fell down a ravine near his home. He knocked himself out but managed to get home. His daughter was called and she took him to hospital. He suffered no broken bones, nor concussion...but many, many bruises. Not being a youngish man, he suffers from them but is not 'broken down'.

We hope Johnny is on the mend by the time you read this newsletter and wish him all the best.



We Have A New Patch!

Over the summer we received our order of 100 club patches. These are suitable for sewing on a jacket, cap or your jammies, so you can proudly display your support for the club.

The price is \$4 each or three for \$10 and they can be picked up at the meeting or a Friday morning

Advanced Amateur Radio Course

The Delta Amateur Radio Society will be holding an advanced radio course starting in November 2014.

As the advanced course is far more intense than the basic course I would advise all interested hams to please read the page regarding the advanced course on our website. http://deltaamateurradio.com/wp/?page_id=402

You may register on the website and an early bird special does apply. Any questions feel free to email: gi@deltaamateurradio.com

The Maple Ridge ARC is Celebrating its 50th Anniversary

We congratulate the MRARC on their first 50 years of activity. The club was formed in January 1964. Founding members included: Floyd Beardsell VE7HI (sk), Pete Orobko VE7FY, Don Knopp VE7BLM, Steve Gold VE7AJA, and Hiram Doughty VE7APE (sk). The club's first few meetings were held in Floyd's basement, before a regular meeting location could be found.

Floyd organized the first Field Day in June 1964, at the Thorn Hill site. Floyd and Pete went on to organize many Field Days over the following two decades. The club's first Ham Fest was held in the late 1970's, with Dick Harlow VE7BRH, Pete and Floyd acting as the organizing committee. This event was and remains the club's primary fund raiser.

The club's first 2m repeater was installed by Floyd and Dick in 1975; and the Club now operates repeaters on 2m, 1.25m, 70cm, as well as Packet.



Page 13—News You Can Lose

The Lighter Side of Amateur Radio

In rural Richland County, WI, a group of ham radio operators were drinking beer after a long day of community service, when one of them, unnamed, age 27 went to get his rifle and began discharging the gun from the rear deck of his home. He was firing at a raccoon that was wandering by, but the beer apparently impaired his aim and, despite of the estimated dozen or so shots he fired, the animal escaped into a 3-foot diameter drainage pipe some 100 feet away.

Determined to terminate the animal, he retrieved a can of gasoline and poured some down the pipe, intending to smoke the animal out. After several unsuccessful attempts to ignite the fuel, He emptied the entire 5-gallon fuel can down the pipe and tried to ignite it again, to no avail.

Not one to admit defeat by wildlife, the determined man proceeded to slide feet-first approximately 15 feet down the sloping pipe to toss the match. The subsequent fireball propelled our intoxicated ham back the way he had come, though at a much higher rate of speed. He exited the angled pipe "like a Polaris missile leaves a submarine," according to witness ham operator.

Mr. Peters was launched directly over his own home, right over his 50ft. antenna tower, and right over the heads of his astonished friends, onto his front lawn. In all, he traveled over 200 feet through the air. "There was a Doppler Effect to his scream as he flew over us, followed by a loud thud". Amazingly, he suffered only minor injuries." "It was actually pretty cool," Our flying ham said from hospital, "Like when they shoot someone out of a cannon at the circus. I'd do it again if I was sure I wouldn't get hurt."



Old Ham Videos

"Mom's funnel becomes a loud-speaker" Click on the photo above to view the video

Are these YLs calling for help or is this a Field Day set-up?



October 2014

Langley Cruise-In Success

Special Event was held September 6th

The raffle draw took place on Sept. 6th at the Langley Cruise-in. Winners were:

1st Prize

Craig Ridelehough

Langley BC

2nd Prize

Dione Gale

Oliver BC

3rd Prize

Al Peterson

Coquitlam BC



Moon-Bound Ham Radio Payload

Will Transmit Earthly Messages from Space

The Amateur Radio payload on the lunar-orbiting 4M-LXS spacecraft is set to carry up to 2500 brief digital messages into space for retransmission via JT65B mode on 145.990 MHz. China recently announced plans to launch the orbiter carrying the 14 kg battery-powered payload, developed by LUXspace in Luxembourg. The International Amateur Radio Union (IARU) is a partner in the experiment. Getting a message into space required registering and uploading one via the 4M website. While the window was open, the site gathered messages of up to 13 characters - the maximum for JT65 transmissions - to transmit "from the moon."

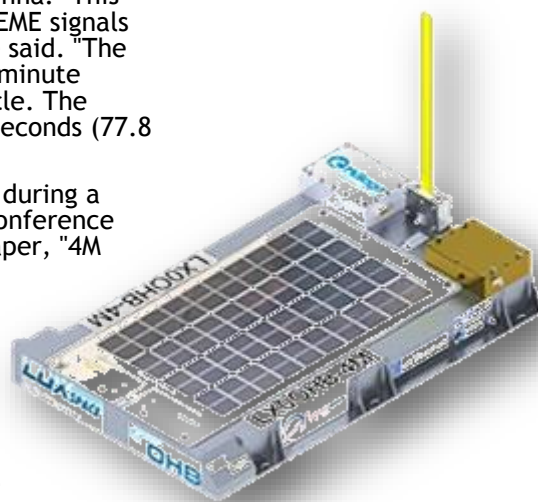
Signals from the Amateur Radio payload can be decoded using the free WSJT software by Joe Taylor, K1JT. The Manfred Memorial Moon Mission memorializes Manfred Fuchs, the late founder and chairman of LUXspace parent company OHB of Bremen. He died in April. The 4M mission is expected to launch sometime after 1800 UTC on October 23.

According to LUXspace, the 4M spacecraft will transmit continuously on 145.980 MHz (± 2.9 kHz) at 1.5 W into a simple

quarter-wave monopole antenna. "This will give S/N comparable to EME signals at Earth's surface," LUXspace said. "The transmission is based on a 1-minute sequence and a 5-minute cycle. The transmission will start 4670 seconds (77.8 minutes) after launch."

The 4M mission was detailed during a presentation the EME 2014 conference held recently in France. A paper, "4M Mission: A Lunar Flyby Experiment" also is available. During the lunar flyby, the spacecraft will be nearly 248,000 miles from Earth and between 7440 and 14,480 miles from the Moon. The spacecraft will be part of the last stage of the lunar mission. The planned trajectory calls for a lunar flyby and return to Earth, with a 90 percent chance that the spacecraft will re-enter Earth's atmosphere. LUXspace has provided a tracking tool on its website.

http://news.xinhuanet.com/english/china/2014-08/10/c_133546027.htm



A model of the LUXspace 4M spacecraft [LUXspace image]

More On Smart Meters



Some months ago there was discussion at the North Shore Club about the then-new smart hydro meters and the desire for a means to monitor power consumption in real time in the home. BC Hydro now makes available an in-home energy monitor for \$35 plus taxes and shipping (total about \$45).

A NSARC member wrote: "I installed one and find the information most interesting. As an example, I found that with no visible power being consumed in the house, our PVR's, sleeping PC's and various other devices in the house draw more than 300 Watts continuously. The unit can run on internal batteries which allows one to go around the house, turn various appliances on and off and observe the change in power consumption. Details about the monitor at:

http://www.bchydro.com/powersmart/residential/smart_meters___conservation/monitors.html?WT.mc_id=join-success-4a"

~North Shore ARC Contact Newsletter

October 2014



SEPAR Report

Fred Orsetti VE7IO



"...There is a planned ARES exercise for Saturday November 8th and SEPAR will be involved.

This exercise is Province wide and will be an excellent opportunity for SEPAR volunteers to practice digital messaging."

We have been conducting digital training using RMS Express software which has been the focus of our training activities. This is going well and we are moving forward with training in the use of RF instead of Telnet. We expect to move into D-Star, D-Rats digital training in early 2015.

SEPAR had a booth at the Cruise-in event in Langley which was well attended. Ticket sales were brisk and the weather was perfect. A big thanks to the many SEPAR volunteers on hand to help with setup, ticket sales and tear down.

SEPAR was at CN days with our communications trailer, and again many volunteers handed out emergency preparedness information to the public as well as answered questions. Marcy, VE7JT, prepared a game for the children requiring them to search for two booths, SEP and the RCMP, in order to fill in, using CW code, a set of letters.

The game involved the SEPAR booth, the SEP booth and the RCMP booth and was a big hit with the children and parents. The children got to use the Morse Code oscillators to send their name in CW. We had 54 children participate.

SEPAR participated in an ESS mini mock exercise at the South Surrey Recreation center in September. This was a small exercise but offered an excellent opportunity for SEPAR to interact with ESS to determine how best we can assist in a level one emergency. Thanks to Peter, VE7PGX, who did an excellent job in organizing this event.

Don, VA7GL, will carry on with the digital training at the monthly meetings and we will carry on with ongoing exercises between meetings.

~Fred VE7IO
SEPAR Coordinator
ve7io@separs.net

Emergency Communications

Provided by a local emergency planning source:

Most of the current "hi-tech" communications systems rely heavily on a sophisticated and vulnerable infrastructure that everyone is addicted to. A single seismic event, terrorist attack or weather event can cripple that infrastructure. However we can bring our own power, experience, expertise and redundant equipment to a disaster. Every HAM can become a communications hub in an EOC, in the parking lot or at home.

In light of the recent terrorist attacks on several American power installations and the ISIS threats to North America, you may want to monitor the following comprehensive news sites. Mainstream media is wanting in many respects and that is probably why they are losing market share and cutting staff.

drudgereport.com and jihadwatch.org

By the way ISIS, Hamas, al Qaeda, Boko Haram, Al Shabab and a host of other terror organizations are all off shoots of the Muslim Brotherhood. If you want to know how they wreak havoc in a democratic country without guns and explosives you may want to check out the following site:

muslimbrotherhoodinamerica.com

Please Get Involved!

TASK/POSITION	TASK MANAGER	ASSISTED BY	SPECIFIC DUTIES
Director 1 - President	John VA7XB	External auditor	Coordinate all activities
Director 2 - Vice President	Brett VE7GM		Back up President as required
Director 3 - Treasurer	Scott VE7HA		Banking, prepare financial statements
Director 4– Secretary	Rob VE7CZV		Record minutes
Director 5 - Communicator	John VE7TI		Prepare Communicator
Director 6 – SEPARS liaison	Stan VA7NF		
Director 7 – At Large	AI VA7ALZ		
Director 8 – RAC Liaison	Bill VE7XS		
Membership	John VE7TI	Steve VE7MAN	Maintain membership list
Net Manager	Rob VE7CZV		Coordinate net control and script
Repeater Manager	George VE7QH		Maintain repeaters
Webmaster			Maintain website
Field Day			Coordinate all FD activities
Foxhunt	Anton VE7SSD	AI VA7ALZ	Organize Foxhunt
Programs			Arrange meeting program
Christmas Party	Jinty VA7JMR		Arrange venue, door prizes, program, awards
Write articles Communicator & website			Ensure that Communicator & Web are provided with timely & accurate info
Contesting	Brett VE7GM	Jim VE7FO, Stan VA7NF John VA7XB	Arrange training, encourage & mentor participants
Assistance to Members	Bill VE7XS; John VE7TI	Brett VE7GM, Alex IZ7FMM, John VA7XB	Help members resolve problems and get on the air
Equipment maintenance	Rick VE7GMO	Jonathon VA7JBC	Check large equipment regularly, keep log, inspect & maintain
Equipment inventory	Anton VE7SSD		Maintain list & track loan-outs
BCARCC Rep	George VE7QH	John VA7XB	Attend meetings annually, represent SARC
Prepare notices for events	John VE7TI		Use graphics software to prepare professional-looking notices
Member Profiles for Communicator	Jinty VA7JMR		Select members and prepare profiles for Communicator
Meeting Refreshments	Anton VE7SSD	Jonathon VA7JBC	Maintain supplies, prepare coffee etc.
Photography	Hui Yee VE7YXG	Anton VE7SSD, John VE7TI, Kapila VE7KGK	Record SARC events
Meet & Greet	All Members		Welcome new members & visitors
Raffle & Cruise-in			Organize & keep track of sales

October 2014



Radio-Active

Jinty Reid VA7JMR



Rick Law
VE7GMO

Rick's mother went into Vancouver for the day... and went into labour so Rick was delivered at the Vancouver General. He was raised on the family farm in Cloverdale. He stated that he is 100% Cantonese coming from a Chinese background with his great grandfather coming from China. Rick speaks Cantonese as well as English.

He has lived in Cloverdale for most of his life and lives there at present. He is the 3rd child of 4 children with his 2 brothers and 1 sister all living in BC. His family owned 375 acres and had a chicken and vegetable farm growing root and green leafy vegetables. It was through working on the farm as a child and later as he, himself, became a farmer, that he learned the value of hard work and also gained a knowledge in a variety of areas such as plumbing, electrical, construction and developing an ability to fix things. Unlike many farm parents, Rick's parents paid him a wage for working on the family farm. He did not have time for extra-curricular activities as his days started at 6:30 am and ended at 8:30 pm. After he left high school Rick attended adult education taking sheet metal work, car body work and welding. At present Rick works in customer service as well as warehouse man, driver and repair man for Agrium, a fertilizer and chemical company.

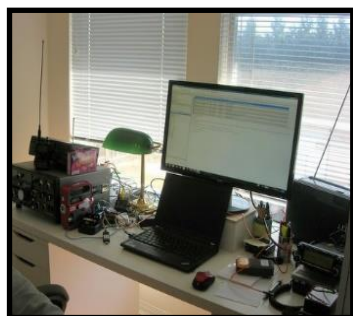
In 1985 he married his wife Susanne who originated from Victoria. She is also Chinese. They have 2 children; Jeffrey aged 27 who is now married with 2 children of his own and Rachel who is 26 years old and lives with her parents in Cloverdale. Rachel is a floral designer who has her European Masters. Rick has travelled to; China, Japan, Taiwan, Philippines, Kuala Lumpur and Singapore.

While caravanning one year Rick met some ham radio operators which sparked (no pun intended) his interest in amateur

radio. At that time he was using a CB and FRS radio only. In 2010 Rick obtained his Basic License with honours and joined SARC. His favourite areas in radio are using 2 metre and 440 radios, RMS and D-Star.

When asked about his future goals Rick says he hopes to retire in 3 or 4 years and participate in fly and river fishing again, and do more travelling in North America with his camper. He has already planned on a visit to Mexico and plans in the future to visit Hawaii. Much later when he has more time he wants to try HF and contesting.

Rick's greatest quality is his ability to stay calm even under duress and Susanne says this is such a comfort to her. Susanne also stated that Rick puts all his energy into new ventures and enjoys furthering his knowledge on a variety of subjects. She also mentioned that he is meticulous in all he does. As a side comment Susanne is interested in learning more about amateur radio and commented she has not seen many women in her experience in the hobby but might eventually try to take her Basic License. We look forward to you joining the rest of us hams Susanne. Thanks to Rick for his assistance in many of SARC activities.





Reminder!!!
My SARC
membership
renewal is due

October Events

Sun	Mon	Tue	Wed	Thu	Fri	Sat
For details on all SARC events, go to ve7sar.net For details on all SEPARS events, go to separ.shutterfly.com/calendar			1	2	3 0800 Club Breakfast: Kalmar Family Restaurant, King George Blvd & 81 st Ave	4 Contest: TARA PSsK Rumble California QSO Party
5 Delta Amateur Radio Society ComFest Contest: California QSO Party	6	7 1930 SEPAR Net 2000 SARC Net 147.360 MHz 110.9 Tone	8 1900 SARC General Meeting	9	10 0800 Club Breakfast: Kalmar Family Restaurant, King George Blvd & 81 st Ave	11
12	13	14 1930 SEPAR Net 2000 SARC Net 147.360 MHz 110.9 Tone	15	16	17 0800 Club Breakfast: Kalmar Family Restaurant, King George Blvd & 81 st Ave	18
19	20	21 1930 SEPAR Net 2000 SARC Net 147.360 MHz 110.9 Tone	22 1900 SARC Exec Meeting	23	24 0800 Club Breakfast: Kalmar Family Restaurant, King George Blvd & 81 st Ave	25 Contest: CQ WW DX SSB
26 Contest: CQ WW DX SSB	27	28 1930 SEPAR Net 2000 SARC Net 147.360 MHz 110.9 Tone	29	30	31 0800 Club Breakfast: Kalmar Family Restaurant, King George Blvd & 81 st Ave	

October 2014

**QRT**

John Brodie VA7XB

CLUB EXECUTIVE 2014-2015

PRESIDENT

John Brodie VA7XB

VICE PRESIDENT

Brett Garrett VE7GM

SECRETARYRob Gilchrist VE7CZV
(also Net Manager)**TREASURER**

Scott Hawrelak VE7HA

DIRECTORSJohn Schouten VE7TI
(Communicator Editor & Membership)

Bill Gipps VE7XS

Al Peterson VA7ALZ

Stan Williams VA7NF

On the Web ve7sar.net

Between newsletters, watch your e-mail for announcements of events, monthly meetings and training opportunities. These announcements can also be found on our web page, or via:

Twitter
[@ve7sar](https://twitter.com/ve7sar)

**SARC Photos
Web Albums**

or

tinyurl.com/SARCphoto

What Kind of Member Are You?

Thanks to all our volunteers and especially to members who continue to take on responsibilities year after year. At the last meeting we reviewed the various tasks that require members' involvement and highlighted those that are unfilled. You will note that some major tasks are still looking for a task leader, particularly Field Day, the Raffle & Cruise-in. In other cases, one or more assistants are needed. This club can only be as good as the participation of its members will allow, so if you enjoy the privileges of membership then you should consider doing your part to make it a better organization.

Please have a look at those positions highlighted on [page 17](#) and let us know what you are willing to do.

~ John VA7XB

Pareto was right...

Known as the 80:20 rule, irrespective of the nature of your business, the Pareto Principle holds that 80% of the consequences of any action come from 20% of the causes. This principle can actually be applied to everything you do. It is a powerful, fundamental principle of life - and of working smart.

The original 80:20 observation was as a result of Italian economist Pareto noticing in 1906 that 80% of Italy's land was owned by 20% of the population. He then carried out surveys on a variety of other countries and found to his surprise that a similar distribution applied. He and others later discovered that this principle is proven in many other areas of interest:

- 80% of results come from 20% of the effort;
- 20% of your customers will account for 80% of your profit.

Apply the 80:20 rule to the information you receive: 20% is useful, whereas 80% is not. The key is to identify and focus on that 20% and ignore or remove the rest completely.

The same is true of time expended for results achieved. Think of the benefits of applying the Pareto Principle to your time management and personal productivity!

Which one of these statements rings true for you?

- 80% of your business comes from 20% of your customers
- 20% of your product or service range contributes 80% of your profit
- 80% of customer complaints originate from 20% of the causes.
- 20% of your individual effort and time achieves 80% of the desired results
- 80% of your business productivity loss results from 20% of the causes
- 20% of your staff is responsible for 80% of the business outputs and results
- 80% of the value in the business is generated by 20% of the processes

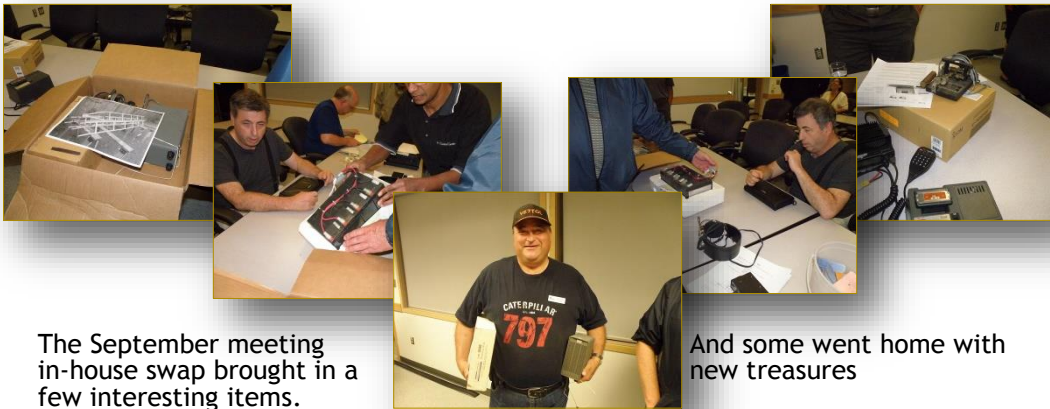
Ring familiar? The same holds true for organizations such as ours. We could use a hand to get the rest of you 80% more involved in Club tasks and activities.



October Meeting

On Wednesday, October 8 at 1900 hrs we will meet at the EMBC PREOC. It promises to be an interesting evening as John White VA7JW returns for another interesting presentation. As most of you probably know, HF antenna radiation patterns are very dependent on the topology of the ground, in all directions, around your QTH. It turns out that it is not just the immediate foreground that is important but also features at distance, including the limiting horizon. For those of you who have used antenna modelling software, you know that the models are based on flat terrain. This probably works well in Regina, but out here we have an interesting landscape composed of hills, mountains, valleys, differing in elevations, in all directions. What HF enthusiasts would like to know is how the topology affects the antenna pattern, in all directions. HFTA - High Frequency Terrain Assessment - software can tell us that, and a lot more.

John will tell you all about this s/w and its features; we look forward to an interesting evening.



The September meeting in-house swap brought in a few interesting items.

And some went home with new treasures

SARC hosts an Amateur Radio net each Tuesday evening at 8 PM. Please tune in to the VE7RSC repeater at 147.360 MHz (+600 KHz) Tone=110.9, also accessible on IRLP node 1736 and Echolink node 496228. On UHF we operate a repeater on 443.775MHz (+5Mhz) Tone=110.9 and Echo-Link Node 1736

	SEPARS Net	SARC Net
1st Tuesday	Drew VA7DRW Jay VE7KC Stdby	Drew VA7DRW Brett VE7GM Stdby
2nd Tuesday	Dixie VA7DIX Alan VA7BIT Stdby	Jinty VA7JMR
3rd Tuesday	Rob VE7CZV	Anton VE7SSD
4th Tuesday	Peter VE7PGX Dixie VA7DIX Standby	John VA7XB
5th Tuesday	Jinty VA7JMR	Elizabeth VE7ELA
Want a turn at Net Control? Contact the SARC Net Manager VE7CZV @ separs.net		

Down The Log...

SARC Monthly Meetings

2nd Wed. (Sept-Jun)
1900 hrs at the
Emergency Mgmt BC
PREOC,
14275 96th Avenue,
Surrey, BC

Weekly Club Breakfast

Friday at 0800 hrs
Kalmar Family
Restaurant at
King George & 81st
Surrey

SARC Net

Tuesday at 2000 hrs
local
on 147.360 MHz (+)
Tone=110.9

SEPARS Net

Tuesday at 19:30 hrs
local
on 147.360 MHz (+)
Tone=110.9

SEPARS Monthly Training

4th Tuesday of each
month, 1900-2100 hrs
14923—64th Ave, next
to Firehall #9, Surrey.

We would like to welcome these sponsors to the Communicator. Please consider their products and services and say you "saw it in the Communicator."

Burnaby Radio Communications

Donald G. Poaps VA7DGP
Radio Data Specialist

4257 Hastings Street
Burnaby, B.C. V5C 2J5
Phone 604-298-5444
Fax 604-298-5455

Commercial / Amateur Radio

Email: sales@burnabyradio.com
web: www.burnabyradio.com

NEW FROM COAX PUBLICATIONS INC!

THE CANADIAN AMATEUR RADIO ADVANCED QUALIFICATION STUDY GUIDE

Canadian Amateur Radio
Advanced Qualification
Study Guide



In response to many requests from our customers, this 340-page book follows the same format and teaching methods as our extremely successful Basic Qualification Study Guide.

It includes unlimited time access to our upgraded and improved Advanced Student Success Pages, Advanced Ask The Professor together with new features to help your understanding.

- ✓ All questions in the Industry Canada Advanced Qualification question bank are covered
- ✓ Additional material to provide context to each topic
- ✓ Goes far beyond the requirements of the question bank to include topics such as digital signal processing (DSP), digital filters, repeaters, networks and remote stations
- ✓ Can be used for self-study or as the text for a class

ONLY \$44.95!

ALSO AVAILABLE FROM COAX PUBLICATIONS INC!

THE CANADIAN AMATEUR RADIO BASIC QUALIFICATION STUDY GUIDE

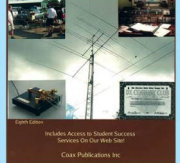
Our best selling study guide for the Basic Qualification, used by most clubs for their courses, this book is designed for both self-study and use in a classroom.

Matched to the Industry Canada question bank, covers all questions while providing context and depth of understanding. Includes unlimited time access to our Basic Student Success Pages and Basic Ask The Professor help.

STILL ONLY \$44.95!

Order both Study Guides from our Secure Web Site:
<http://www.coaxpublications.ca>
or e-mail: coaxpublications@liffle.ca

Canadian Amateur Radio
Basic Qualification
Study Guide



Coax Publications is committed to providing accurate and up to date study materials. Any new material required due to the IC question review will be provided immediately via the Student Success Pages on our web site as a free download.

COAX Publications



KG-UV8D 2014 NEW
PRODUCT DEBUT!
TOURIST/HAM NECESSITIES

START TO TRAVEL!

NEVER MET SUPER FUNCTION



FLEETWOOD

DIGITAL PRODUCTS

Two Way Radios... For Less
<http://www.fleetwooddp.com/digital>

radio@fleetwooddp.com
(604) 800-4042

Bearcat

CB radios

Groundbreaking Wireless
Microphone Compatibility

scanners

Bring information in & around your neighborhood.

marine electronics

On or offshore, we've got you covered.



Latest Model Available!

QUAD BANDS TRANSMISSION (including SW)
EIGHT BANDS RECEPTION (including AM & SW)

Twin Band/Same Band Simultaneous Reception:
Duplex Mode (Cross-Band Simultaneous TX&RX) Duplex Cross-Band Repeat:
Same-Band Repeat on two Combined Radios; 8 groups of Scrambler SOS Function

KG-UV950P

